

Remarks

Claims 1 to 6 and 8 to 25 are in this application.

Applicant affirms the election of the claims of Group 1, i.e. claims 1 to 6, 8 to 16 and 23 in response to the requirement for restriction.

An Abstract of the Disclosure has been added corresponding in part to the Abstract of the published application US 2006/ 0147666.

The description has been amended to insert the formula omitted from the application as filed in order to conform with the International Application.

Claims 9, 11, 12, 13 and 15 have been corrected as requested.

Claim 7 has been cancelled.

Reconsideration of the rejection of claims 1 to 5, 9 to 13 and 16 as being anticipated by Schiavone is requested.

Claim 1 provides a method for producing a polyester hollow body made of drop-shaped, ball-shaped or ball-like polyester granulate with a granulate diameter of less than 2 mm, "characterized in that ... the melt is transformed by drop shaping into a drop-shaped, ball-shaped or ball-like shape and is thereafter solidified".

Schiavone, in paragraphs [0083] and [0084], describes the use of polyester chips that are not produced via drop shaping and will not be drop shaped, ball shaped or ball-like shaped. Accordingly, for this reason alone, a rejection of claim 1 as being anticipated by Schiavone is not warranted pursuant to the provisions of 35 USC 102.

Furthermore, claim 1 requires the drop-shaped, ball-shaped or ball-like polyester granulate to have a granulate "diameter of less than 2 mm". The examiner considers the particle size of Schiavone to be in a range of from 1 mm to 10 mm citing claim 4. Issue is taken in this respect.

Schiavone describes the average minimum dimension of 1 - 10 mm to be the dimension of the shortest side of a polymer chip. See [0083]. Due to its non-ball like form such a chip will have at least one further face with a dimension of clearly more than 2 mm. Thus, the polymer chips according to Schiavone do not have a diameter as required by claim 1. For this additional reason, a rejection of claim 1 as being anticipated by Schiavone is not warranted pursuant to the provisions of 35 USC 102.

As extensively discussed in the description of the prior art of this application, the shaping of the polymer after melt polycondensation and before solid-state polycondensation has a significant effect on the properties of the obtained product. Therefore, it was not obvious for a skilled person to use the inventive drop shaping technique in the process according to Schiavone.

Claims 2 to 6 and 8 to 16 depend from claim 1 and are believed to be allowable for similar reasons.

Claim 11 further requires the polyester to comprise a copolymer of polyethylene terephthalate, with the diol component consisting of more than 94% of ethylene glycol and the dicarboxylic acid component consisting of approximately 100% of terephthalic acid. Schiaovone, at [0021], describes the terephthalate component as including "between about 90 and 96 mole percent

terephthalic acid ...". It is respectfully submitted that Schiaovone at [0021] provides a range that explicitly excludes a value of approximately 100% as claimed.

While [0023] of Schiavone describes an embodiment with 100 mole percent terephthalic acid, the diol component consists of "between about 84 and 94 mole percent ethylene glycol" not "more than 94% of ethylene glycol" as claimed.

It is respectfully submitted that neither [0021] or [0023] of Schiavone describes a diol component as claimed. Instead, Schiavone describes the diol component consisting of "between about 94 and 98 mole percent ethylene glycol or "between about 84 and 94 mole percent ethylene glycol". Accordingly, a rejection of claim 11 as being anticipated by Schiavone is not warranted pursuant to the provisions of 35 USC 102.

Claim 12 requires the polyester to comprises a copolymer of polyethylene terephthalate, with the diol component consisting of "more than 98% of ethylene glycol". It is respectfully submitted that neither [0021] nor [0023] of Schiavone describes a diol component as claimed. Instead, Schiavone describes the diol component consisting of "between about 94 and 98 mole percent ethylene glycol or "between about 84 and 94 mole percent ethylene glycol". Accordingly, a rejection of claim 12 as being anticipated by Schiavone is not warranted pursuant to the provisions of 35 USC 102.

Claim 14 has been rejected as being unpatentable over Schiavone in view of Duh on the basis that it would be obvious to modify the process of Schiavone

by conducting a preheating step as in Duh. Reconsideration of this rejection is requested.

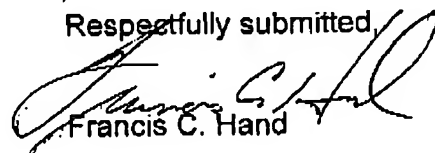
Claim 14 requires the step of preheating to the after-condensation temperature in solid state polycondensation to occur in a period of 1 to 10 minutes and, preferably, 2 to 8 minutes. The rapid preheating contributes to the low crystallinity in the inner parts of the polyester granulates. This results in a high reaction speed in the following solid state condensation, i.e. fast raising of IV during the reaction (see paragraph [0075] ).

Duh allows preheating to between 180°C and up to about 1° C below the melting temperature of the polymer for a time of 5 to 60 minutes [0026]. Furthermore, Duh explicitly teaches away from using short preheating times when mentioning the drawback of PET granules becoming sticky because of the rapid rise of polymer temperature. Therefore, one of ordinary skill in the art would not be motivated by Duh to modify the process of Schiavone by preheating to the after-condensation temperature in a period of 1 to 10 minutes. Accordingly, a rejection of claim 14 as being unpatentable over Schiavone in view of Duh is not warranted pursuant to the provisions of 35 USC 103.

The remaining references have been reviewed; however, none is believed to be pertinent to the claimed process, taken alone or in combination.

The application is believed to be in condition for allowance and such is respectfully requested.

Respectfully submitted,



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